

# Forest Health Protection Pacific Southwest Region



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To: Patricia Grantham, Forest Supervisor, Klamath National Forest

Subject: Biological Evaluation of Proposed Six Mile LSR Thinning Project –

Salmon/Scott River Ranger District (FHP Report No. N09-04)

On May 18-21, 2009, Cynthia Snyder, Entomologist, and Pete Angwin, Plant Pathologist, Forest Health Protection (FHP), accompanied by Roger Siemers, Silviculturist, Klamath National Forest, visited the Klamath National Forest to review past, current and future projects requesting FHP funding.

On May 18, we were joined by Dave Burgess and Jessica Larson (Salmon/Scott River Ranger Districts) to look at the Six Mile Late Successional Reserve (LSR) thinning project, Scott River Ranger District. Objectives of the project are to protect the resources from catastrophic events such as fire and insect outbreaks, and to accelerate the young stands to achieve old growth characteristics.

## **Background**

The Klamath NF wants to accomplish 165 acres of block treatments over a two year period precommercial thinning, hand piling and burning. The project area is located in the Six Mile Creek drainage and is entirely within the Six Mile LSR. Most of the stands that will be proposed for 2010 are under the Great Scott PCT NEPA, signed 7/09/2007, with one stand under the Eddy LSR NEPA planned for completion in 2009. The remaining stands will be proposed for 2011 and will be under the Salmon River PCT NEPA planned for completion in 2010.

We visited the area on May 18, and saw plantation units 439-1, 2, 3, 6, 17, 21, 28, 36, and 38 (Figures 1 and 2). All plantations are mixed conifer type; post timber harvest with no given fire history. Plantations range from 21 to 52 years old and consist primarily of precommercial-sized ponderosa pine and Douglas-fir with lesser amounts of Jeffrey pine, white fir, sugar pine and incense cedar and an ingrowth of hardwood species. Stocking densities range from 170-500+ trees per acre with the majority of the trees occupying the codominant crown class, creating a closed canopy.

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#### **Observations**

The stands are becoming very dense, and the risk of attack by western and mountain pine beetle (*Dendroctonus brevicomis* and *Dendroctonus ponderosae*, respectively) is increasing. The risk of crown fire and mortality from drought is likewise increasing. In addition, small amounts of Douglas-fir dwarf mistletoe (*Arceuthobium douglasii*) were also noted in the Douglas-fir in Stand 439-17.







Figure 2. Overstocked ponderosa pine plantation (unit 439-1) at Six Mile LSR.

To address this problem, the District plans to precommercially hand thin the plantations, leaving only the healthiest, most vigorous, defect-free trees. Douglas-fir infected with dwarf mistletoe will be removed, while healthy Douglas-fir, white fir, sugar pine, incense cedar and hardwoods will be retained to enhance vegetative species diversity. Stocking levels will be reduced to between 75 and 100 trees per acre (20-30 foot spacing) and fuels will be hand piled and burned.

### **Summary and Conclusions**

The Six Mile LSR projects, if fully implemented, will be effective in addressing concerns regarding bark beetles, fire and drought, help develop and enhance old growth characteristics in the Six Mile LSR by producing more diverse and resilient stand structure and enhance wildlife values. The proposed thinning will also meet the Regional Forester's density management policy that high risk density levels will not be reached again for at least 20 years.

The Scott/Salmon River Ranger Districts and Klamath National Forest have an excellent record of accomplishment in the planning and timely implementation of similar thinning treatments. I support the Six Mile LSR project for funding consideration in FY2010 and FY2011.

If you have any questions regarding this report and/or need additional information please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

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# Northern CA Shared Services Area

cc: Roger Siemers, Dan Blessing, Dave Burgess, Jessica Larson, Carl Varak, Ray Haupt, John Buehler, Pete Angwin, Sheri Smith, Julie Lydick and Phil Cannon